Jlab EP Program Status 2/16/06

Jlab Personnel: John Mammosser
Ralph Afanador – Cabinet modifications and chemical support
Scott Williams - Mechanical support, mounting cavity
Jim Takacs – Design hardware and mechanical support

1. End Group Modification to adapt 9-cell cavity and to allow for quick disconnect
    a. All Teflon adaptors fabricated installation in progress
    b. Copper disk was modified for the new Teflon adaptor and was installed
    c. Quick connect hardware designed,
    d. New rotary sleeve fabricated, 1 end assembled and waiting for testing, 2 end being modified
    e. Cavity weighed 48lbs no end groups, 55 lbs S35, volume was 24 ¼ liters
    f. Next effort
        i. Order quick connect hardware and install (complete 2/28)
        ii. Design completed for anode contact and is being reviewed, need to fabricate these (3/16)
        iii. Design a holder for moving the graphite anode contact to the side and fabricate (3/16)
        iv. Fabricate a cathode for the 9-cell cavity (3/9)
    g. Mount the cavity into the fixture (3/23)
2. Cabinet Preparation
    a. Plumbing 90% complete Install HF Venturi into acid lines (ordered ,??)
    b. Next effort
        i. Order chemicals
        ii. Need to program PLC and checkout system (3/20)
3. Adapt process tooling to 9-cell cavity
    a. Design and fabricate cage adaptor plates to SNS cages (holding and alignment of cavity for HPR and test stand) Started and waiting for further modifications (??)
    b. Design an alignment gauge (??)
    c. Next effort
        i. Install cavity into cage and align
        ii. Move cavity through process steps (degreasing , HPR, insertion into test stand)
4. Prepare for Testing
    a. Fabricated RF test flanges (1 set) and chemistry blanks (1 set)
    b. S35 data received and frequency and bead pulls performed
    c. Modifications to the RF test system identified
    d. Software mods identified
    e. Next effort
        i. Identify RF amplifier for system (??)

        ii. Adapt software to 9-cell cavity (??)
5. Develop assembly procedures
    a. Not started yet
6. Supporting Chemical Tests for EP effort
    a. Started setting up chiller and acid storage in offline chemroom- will be able to support temperature controlled experiments for larger acid volume tests.